Listing of Claims

1. (Original) Direct methanol fuel cell apparatus comprising:

a fuel container;

an anode adjacent the fuel container;

a proton exchange membrane adjacent the anode;

a cathode adjacent the proton exchange membrane;

an oxygen supply adjacent the cathode;

the fuel container containing methanol in water at a first concentration;

a cartridge selectively communicatively coupled with the fuel container;

the cartridge containing fluid comprising methanol in water at a second concentration, the second concentration higher than the first concentration.

2. (Original) The apparatus of claim 1 wherein the second concentration is at least double the first concentration.

3. (Original) The apparatus of claim 2 wherein the second concentration is at least triple the first concentration.

4. (Original) The apparatus of claim 1 wherein the selective communicative coupling comprises a pushing pin actuable by a human user, said pin puncturing the cartridge.

5. (Original) The apparatus of claim 1 wherein the selective communicative coupling comprises a pump actuable by electronic means, said pump pumping fluid from the cartridge to the container.

6. (Currently Amended) A method for use with a direct methanol fuel cell, the method comprising the steps of:

bringing a first solution of methanol in water at a first concentration into contact with an anode, the first solution contained within a container;

bringing oxygen into contact with a cathode, the cathode adjacent a proton exchange membrane and the proton exchange membrane adjacent the anode;

at a later time, bringing a cartridge into communicative coupling with the container, the volume of the container being greater than the volume of the cartridge, the cartridge containing a second solution of methanol in water at a second concentration, the second concentration higher than the first concentration.

7. (Original) The method of claim 6 wherein the second concentration is at least double the first concentration.

8. (Original) The method of claim 7 wherein the second concentration is at least triple the first

concentration.

9. (Original) The method of claim 6 wherein the step of bringing the cartridge into communicative coupling with the container comprises a human user pushing a pin, said pin puncturing the cartridge.

10. (Original) The method of claim 6 wherein the step of bringing the cartridge into communicative coupling with the container comprises actuating a pump, said pump pumping fluid from the cartridge to the container.

11. (Original) Direct methanol fuel cell apparatus comprising:

a fuel container;

an anode adjacent the fuel container;

a proton exchange membrane adjacent the anode;

a cathode adjacent the proton exchange membrane;

an oxygen supply adjacent the cathode;

the fuel container containing methanol in water; and a stirrer within the fuel container.

12. (Original) The apparatus of claim 11 further comprising electronics operating the stirrer at

intervals as a function of measurements made regarding the fuel cell apparatus.

13. (Currently Amended) A method for use with a direct methanol fuel cell, the method comprising the steps of:

bringing a solution of methanol in water into contact with an anode, the solution contained within a container;

bringing oxygen into contact with a cathode, the cathode adjacent a proton exchange membrane and the proton exchange membrane adjacent the anode;

at a later time, stirring the solution wherein the stirring occurs as a result of stirring by a stirrer contained within the container.

14. (Currently Amended) A method for use with a direct methanol fuel cell, the method comprising the steps of:

bringing a solution of methanol in water into contact with an anode, the solution contained within a container;

bringing oxygen into contact with a cathode, the cathode adjacent a proton exchange membrane and the proton exchange membrane adjacent the anode;

at a later time, stirring the solution, wherein the stirring occurs as a result of a human user moving the fuel cell while it is in use.

15. (Cancelled)

16. (New) Direct methanol fuel cell apparatus comprising:

a fuel container;

an anode adjacent the fuel container; a proton exchange membrane adjacent the anode;

a cathode adjacent the proton exchange membrane;

an oxygen supply adjacent the cathode;

the fuel container containing methanol in water at a first concentration;

a cartridge selectively communicatively coupled with the fuel container;

the fuel container having a greater volume than that of the cartridge; the cartridge containing fluid comprising methanol in water at a second concentration, the second concentration higher than the first concentration.

17. (New) The apparatus of Claim 4 further comprising a safety lock serving to prevent inadvertent pushing of the pushing pin.

18. (New) The apparatus of Claim 4 further characterized in that the pin is movable in relation to the fuel container.

19. (New) The apparatus of Claim 19 further characterized in that the cartridge selectively communicatively coupled with the fuel container is stationary with respect to the fuel container.